



UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

09/425,516

APPLICATION NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO.
09/425,516	10/22/99	FREEMAN	G RPI-004C3CN

000959  
LAHIVE & COCKFIELD  
28 STATE STREET  
BOSTON MA 02109

HM12/0405

EXAMINER

GAMBEL, P  
ART UNIT PAPER NUMBER

DATE MAILED: 04/05/01

This is a communication from the examiner in charge of your application.  
COMMISSIONER OF PATENTS AND TRADEMARKS

OFFICE ACTION SUMMARY

☒ Responsive to communication(s) filed on 10/22/99

☐ This action is FINAL.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 D.C. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 1 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

- ☒ Claim(s) 28, 65-69 is/are pending in the application.  
Of the above, claim(s) is/are withdrawn from consideration.  
☐ Claim(s) is/are allowed.  
☐ Claim(s) is/are rejected.  
☐ Claim(s) is/are objected to.  
☒ Claim(s) 28, 65-69 are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.  
☐ The drawing(s) filed on is/are objected to by the Examiner.  
☐ The proposed drawing correction, filed on is ☐ approved ☐ disapproved.  
☐ The specification is objected to by the Examiner.  
☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).  
☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been  
☐ received.  
☐ received in Application No. (Series Code/Serial Number)  
☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received:

- ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- ☐ Notice of Reference Cited, PTO-892  
☐ Information Disclosure Statement(s), PTO-1449, Paper No(s).  
☐ Interview Summary, PTO-413  
☐ Notice of Draftsperson's Patent Drawing Review, PTO-948  
☐ Notice of Informal Patent Application, PTO-152

--SEE OFFICE ACTION ON THE FOLLOWING PAGES--

Serial No. 09/425516  
Art Unit 1644

#### DETAILED ACTION

1. The location of your application in the PTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Art Unit 1644, Technology Center 1600.
2. Applicant's communication, filed 10/22/99 (Paper No. 2) has placed this application in compliance with the Sequence Rules.  
Applicant is reminded to amend the specification accordingly.
3. Applicant's amendment, filed 10/22/99 (Paper No. 2), is acknowledged.  
Claims 1-27 and 29-2 have been canceled.  
Claim 28 has been amended.  
Claims 65-69 have been added.  
  
Claims 28 and 65-69 are pending.
4. Restriction to one of the following inventions is required under 35 U.S.C. § 121:
  - I. Claims 28 and 65-68, drawn to methods of inhibiting B7-2-mediated interactions, with B7-2 and B7-2-specific antibodies alone or in combination; classified in Class 424, subclasses 130.1 and 184.1.
  - II. Claim 69, drawn to a B7-2 fusion proteins, classified in Class 530, subclass 387.3.
5. Inventions I and II are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (M.P.E.P. § 806.05(h)).  
  
In the instant case, the product as claimed can be used in a materially different process such as affinity purification procedures or detection assays. In addition, the process can be practiced with B7-2-specific antibodies.
6. Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II and Groups I and II have acquired a separate status in the art because the searches are not co-extensive and encompass divergent subject matter, restriction for examination purposes as indicated is proper.

Serial No. 09/425516

Art Unit 1644

7. This application contains claims directed to the following patentably distinct species of the claimed Group I: wherein the agent which inhibits B7-2 binding is:

- A) B7-2 or
- B) B7-2-specific antibody.

These species are distinct because their structures and physicochemical properties differ to the extent that a person of ordinary skill in the art would not envision one in view of the other. Therefore, they are separate and patentably distinct species issues in determining patentability.

Applicant is required under 35 U.S.C. § 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claim 28 is generic, for example.

8. In addition; this application contains claims directed to the following patentably distinct species of the claimed Group I: wherein the method further comprises the administration of:

- A) CD28-specific antibody,
- B) CTLA-4-specific antibody,
- C) CTLA4Ig fusion protein,
- D) CD28Ig fusion protein,
- E) cytokine-specific antibody,
- F) immunosuppressive drug, or
- G) an agent that blocks the interaction of B7-1 with its natural ligand.

In addition; if applicant elects (E) or (G); applicant is required to elect a patentably distinct species of :

- E) cytokine-specific antibody or
- G) an agent that blocks the interaction of B7-1 with its natural ligand

These species are distinct because their structures and physicochemical properties differ to the extent that a person of ordinary skill in the art would not envision one in view of the other. Therefore, they are separate and patentably distinct species issues in determining patentability.

Applicant is required under 35 U.S.C. § 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claim 28 is generic, for example.

9. Applicant is advised that a response to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Serial No. 09/425516  
Art Unit 1644

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 C.F.R. § 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. M.P.E.P. § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. § 103 of the other invention.

10. Applicant is advised that the response to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed.

11. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 C.F.R. § 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a diligently-filed petition under 37 C.F.R. § 1.48(b) and by the fee required under 37 C.F.R. § 1.17(h).

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phillip Gambel whose telephone number is (703) 308-3997. The examiner can normally be reached Monday through Thursday from 7:30 am to 6:00 pm. A message may be left on the examiner's voice mail service. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Chan can be reached on (703) 308-3973. Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center 1600 receptionist whose telephone number is (703) 308-0196.

Papers related to this application may be submitted to Technology Center 1600 by facsimile transmission. Papers should be faxed to Technology Center 1600 via the PTO Fax Center located in Crystal Mall 1. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The CM1 Fax Center telephone number is (703) 305-3014.



Phillip Gambel, PhD.  
Primary Examiner  
Technology Center 1600  
April 2, 2001